

**The University of San Francisco**  
**USF Scholarship: a digital repository @ Gleeson Library |**  
**Geschke Center**

---

Master's Projects and Capstones

Theses, Dissertations, Capstones and Projects

---

Summer 8-9-2019

# Preventing Falls in a Medical Surgical Unit

shalini singh  
shalsingh71@gmail.com

Follow this and additional works at: <https://repository.usfca.edu/capstone>

---

## Recommended Citation

singh, shalini, "Preventing Falls in a Medical Surgical Unit" (2019). *Master's Projects and Capstones*. 947.  
<https://repository.usfca.edu/capstone/947>

This Project/Capstone is brought to you for free and open access by the Theses, Dissertations, Capstones and Projects at USF Scholarship: a digital repository @ Gleeson Library | Geschke Center. It has been accepted for inclusion in Master's Projects and Capstones by an authorized administrator of USF Scholarship: a digital repository @ Gleeson Library | Geschke Center. For more information, please contact [repository@usfca.edu](mailto:repository@usfca.edu).

Preventing Falls in a Medical-Surgical Unit

Shalini Singh, BSN, RN. MSN Graduate Student

University of San Francisco

### Abstract

The prevention of patient falls continues to remain a challenge in healthcare. Up to 30% of falls often result in injury, which includes fractures, soft tissue trauma, or even death (Titler, 2016). Out of the recorded number of falls in hospitals worldwide, between 4% to 7% result in severe injuries to the patients. Falls in the hospital can prolong a hospital stay, increase hospital costs, and extend a discharge from home to a long-term care facility. With the prolonged stay of patients who fall in hospitals, hospitals costs are in a rise. Falls can increase the cost for not just hospitals but higher hospital bills for the patient as an outcome.

There will be a commitment to meet all patient needs and make improvements to what is not working. Safety is critical to a Medical-Surgical unit, and to keep our patients safe from falling, we have fall preventions tools implemented on the unit such as yellow armband, bed, chair alarms and signs outside the door that lets everyone know that the patient is at high risk for falls. An ongoing commitment to the patient has been reinforced, and daily huddles are performed to remind the staff on safety implementations. In order to decrease the patient, fall rate, and increase patient's safety a reinforcement training on the practice and standard work for patient toileting, alarms, and hourly rounding is needed for continuous improvement.

*Keywords:* falls, fall education, safety protocols, and fall prevention

## **Introduction**

### **Problem Description**

Falls are considered major global public health problem and the leading cause of accidental or unintentional injury and hospitalization. Falls in a hospital are associated with longer length of stay, readmissions, and poor outcomes. According to the Center for Disease Control (CDC), treating falls can be costly. In 2015 the total medical cost for falls were more than \$50 billion, and the average hospital cost for fall-related injuries was over \$30,000 (CDC, 2017). Each year millions of people that are 65 and older are being treated for falls and costs for treating fall-related injuries goes up with age. Falls can be a devastating experience for not only the patient but also the staff that is involved. Preventing falls is a vital component of safe quality care. Adding fall harm reductions strategies can assist in preventing serious injuries and can save the hospital lots of money.

Medicare and Medicaid services talk about falls as being associated with morbidity and mortality and state that inpatient falls are on top of hospital-acquired conditions and even went to the point of discontinuing payments for preventable injuries that occurred during a hospital stay due to a dangerous fall, such as fractures, intracranial injuries, and dislocations. Inpatients fall increases additional days of stay for a patient, and that means an increase in cost for not only the patient but also for the hospital. That can lead to huge penalties if hospitals show a high rate of falls (Huey-Ming, 2016). Underlying causes that might increase a patient's risk to fall can be medications that sedate, patients can be dizzy or visually impaired. Also, post-surgical procedure, cognitions declining, and decreased strength and mobility can also be a risk for falls. According to Huey-Ming injurious falls are the most common inpatient event.

Hospitals continue to use fall risk scores such as the Schmid scales which often score patients a lower score than what they are. Staff uses universal precautions in order to keep patients safe, yet they still fall. Falls risk scores can be useful if assessed right along with having authentic hourly rounding as a check-in for safety.

### **Available Knowledge**

Would re-implementing a fall prevention protocol reduce the rate of falls compared to the current fall preventions plan?

Would (I) putting in place a fall prevention programs such as authentic hourly rounding, alarms that will prevent the hospital falls (P) in a patient population in the Medical-Surgical Unit (C) compared to the existing policy methods used versus not following the policy (O) reduce the number of falls among the elderly by using prevention programs like alarms or hourly rounding to reduce falls by 50% by February 2020.

A Literature review was conducted using CINAHL and PubMed to search for the evidence-based articles to determine what evidence-based practices would answer the PICO question to decrease inpatient fall in a medical-surgical nursing unit. Key words such as fall education, safety protocols, and fall prevention were used to narrow down the search. Many articles were found. The MSN-CNL student retrieved different articles on systemic reviews, quantitative and qualitative analysis using evidence-based guidelines.

Fall injuries in hospitals are the most reported adverse events among adults in the hospital. Quigley et al. (2007), discussed qualitative research the core components of a patient safety culture and the integration of these components with the role of nurses, fall prevention and high reliability. Measurement and improvement around falls prevention in the hospital are very important as falls are a nurse-sensitive measure and nurses play a key role in this component of

patient care (AHRQ, 2012; Quigley et al. 2007). This model could be applied to hospitals adverse conditions and could better support the identification of best practice for hospital safety.

In a prospective pre-post implementation cohort design article by Titler et al., a described the effects of translating research into practice intervention to promote the use of evidence-based fall prevention interventions in hospitalized adults. A multi-faceted Translating Research into Practice Intervention was used to implement the Targeted Risk Factor Fall Prevention Bundle composed of evidence-based fall prevention interventions designed to mitigate patient-specific fall risks. Dependent variables (fall rates, fall injury rates, fall injury type, use of Targeted Risk Factor Fall Prevention Bundle) were collected at baseline, and following completion of the 15month implementation phase. Nurse questionnaires included the Stage of Adoption Scale, and the Use of Research Findings in Practice Scale to measure the adoption of evidence-based fall prevention practices. A Medical Record Abstract Form was used to abstract data about the use of targeted risk-specific fall prevention interventions. The number of falls and number and types of fall injuries was collected for each study unit for 3months pre- and post-implementation. As a result, the rate of falls declined by 22%.

A systematic review of the analysis done on three different types of falls risk assessment tools did not identify any one specific risk assessment tool as the best. This was because "risk stratification of falling patients is difficult, as the etiology of inpatient falls is multifactorial" (Simpson, Rosenthal, Cumbler & Likosky, 2013, p.136). The risk assessment tools were essential in identifying those patients at greater risk for falls and could be used to stratify the patient population based on the common themes, thus being able to develop preventive measures to address those common themes. Some of the common items that were also in the Schmid fall risk tool were mobility, mentation, elimination, prior history of falls, and current medications. In

the Simpson, et al. analysis, they indicated that the setting and the population of users should be considered when selecting a fall risk assessment tool. The MSN-CNL student determined that it would be beneficial and fiscally responsible to continue using the Schmid risk assessment tool that's already available in the electronic medical record and includes staff training on how to perform a correct assessment of the patient.

A pilot study conducted on three acute patient care units at the 649-bed Vanderbilt University Medical Center in 2014 by Frances et al., describes the quality improvement project used. Design of the pre-post study was used to test whether the multifaceted fall prevention strategy could target various types of fall risk factors and reduce falls on three acute patient care units with a total of 86 beds. The authors indicated that most falls were preventable with early detection of fall risk factors. Clinicians should assess fall risks by reviewing patient's clinical conditions, examining the environment, monitoring toileting patterns, observing activity levels, tracking the staffing level, and evaluating medications (France et al., 2017). The finding of the pre-post study concluded the effectiveness of fall prevention interventions, which contain strategies to improve leadership collaboration, increase the quality of rounding, enhance staff education, and promote environmental safety (Frances et al., 2017). This research indicated the importance of developing fall prevention strategies that will involve multicomponent interventions to tackle various risk factors among assessed populations and the environment.

A systematic review by Weaver et al identifies and assesses interventions used to promote safety culture or climate in acute care settings. The author selected studies that targeted health care workers practicing in inpatient settings and included data about the change in patient safety culture or climate after a targeted intervention. Evidence evaluated suggested that interventions can improve perceptions of safety culture and potentially reduce patient harm.

Data analysis of fall rates by types of falls and its severity of the falls-related injury, which can help facilities examine the effectiveness of their interventions and program outcomes were summarized by Quigley et al. (2007). In order to determine the effectiveness of the program, data is analyzed using a variety of statistical measures to assess program impacts. Safety Standards: Implementing Fall Prevention Interventions and Sustaining Lower Fall Rates by Promoting the Culture of Safety on an Inpatient Rehabilitation Unit is a quantitative retrospective review of IPR fall rate performed. Quarterly fall rates were compared with implementation dates of fall prevention interventions (safety huddles, hourly rounding, and signage). The culture of safety scores was also examined to assess if the rate of falls had decreased, and if there was sustainability.

Summarization of a 3-month descriptive study conducted in a Magnet Healthcare System by Barrett, Vigirada, and Zhou (2017) was reviewed. The study surveyed five hundred and three RNs and three hundred and ninety-six PCTs. The purpose was to test whether RNs and PCTs on the Medical-Surgical floors had different understandings of patients' fall risk factors while helping them with toileting. The study concluded that RNs and PCTs had different understandings of patients' associated risk factors, including medications, secondary diagnoses, and toileting. Thus, it is vital for RNs to involve PCTs in the plan of care and communicate with them consistently regarding the patient's conditions, mobility status, side effect of medications, and precautions (Barrett et al., 2017). The current project will include education for RNs, CNAs, and sitters. The study findings support the goal to improve the quality of communication among RNs, CNAs, and sitters.



### **Rationale**

Kotter's Eight Steps to Change to promote the change process of the fall prevention project was utilized in this project the change process of the fall prevention project. (**See Appendix A to refer to the Kotter's Eight Steps to Change Process Diagram**). Meeting with the unit management team was the first three steps of Kotter's in mobilizing a commitment to making a change to provide a safe environment for a better-quality outcome for the patient. Everyone on the team agreed for the change the was needed and would assist in promoting the frontline staff in taking ownership and to be engaged in the improvement process and the next three steps of Kotter's Engaging and Enabling the organization was utilized.

The hospital leaders and unit management team commitment to ensure that all medical-surgical staff was given time to attend the education sessions on the evidence-based practice for hourly rounding and communication. It was important to give time in the plan to be able to gain a commitment at the beginning of the project to be able to get the staff to embrace their roles and responsibilities in developing standard work process and commitment. An explanation of the roles and responsibilities was very important to address in regard to the interventions of hourly rounding and communication among the unit staff regarding toileting needs. The roles and responsibilities needed to be clearly defined for the importance of hourly rounding as the staff was somewhat resistant to the changes. They felt that it was already being done and why do they have to learn it again. The education was a shared vision that was built together as a team in the willingness to make a change that was needed for improvement. When the staff started to accept the changes, the team began to see small improvements. Kotter; final three steps of implementation and sustaining the change will be a work in progress for the unitteam.

### **Specific Project Aim**

The aim of this fall reduction project is to educate the nursing staff to learn, review, and apply fall prevention interventions for fall risk patients in order to help reduce fall rate by 50 percent May 2020. The setting for this project is in one of the 28-bed medical-surgical units at the hospital, which consists of a population of stroke, medical, and surgical patients.

A good and effective and robust education plan staff will be implemented on the risk related injuries that can occur and how to provide a safer environment which will be incorporated for the strategy to work. The medical-surgical units previous performance year had a total of fourteen falls. This requires a focus on two evidence-based practice that can be built into the staff standard work to achieve continuous improvement. Starting with a structured plan and having the hospital teams full support will increase the success of improvement for patient care (AHRQ, 2013).

This proposal to provide refresher training to change staff practices to a more reliable method for preventing patients from falls. The standardized work will decrease patient fall, and improve patient safety, thus increase patient satisfaction score, reduce the cost of the facility. One other factor is the staff on the unit, will feel supported that this issue is being addressed globally (unit wide) and not individualized. The training will improve job satisfaction, empowered that they could make changes together for patient safety.

### **Methods**

#### **Context**

The assessment by the MSN-CNL student of the medical-surgical unit through interviews and observations with the unit management team was completed. The observation by the MSN-CNL student was that quality rounding was not being done. Medical-surgical nurse has a 1:5

ratio and often because of time constraints, they shorted their hourly rounding and it was not really effective.

A proposal to provide refresher training to change the staff practices to a more reliable method for preventing patient falls was planned. To be able to understand the challenges that can be faced in reducing falls in the unit. The unit administration developed a Strength, Weakness, Opportunity, and Threat SWOT analysis along with a Fishbone diagram in order to work on opportunities for improvement (Appendix B). The strength of the unit was the regular staff who have worked on the unit for years, and the unit leaders who regularly round on the unit. The recent change in managers and the drop of communication within the unit on falls incidences were the identified weakness. This weakness after a few changes from the improvement project was started, and a new manager was on board. The new manager provided the direction along with the assistance from the assistant managers and addressed the culture of the unit and implemented several changes that improved sharing of information.

The new manager also set firm and clear expectations with the front-line staff and her nurse leaders with being equally involved in the improvement project. The hourly rounding would now be a shared task of the staff nurse and the patient care technician, odd hours for staff nurse, and even hour for patient care technicians. During the change of shift, each would hand off patient safety during the report and ensure to share what type of safety equipment, and if the alarm was used to keep the patient safe. This would be an expectation for all shifts, not just one. At the shift huddle, the Assistant manager would communicate the patients and their room numbers who are at high risk for falls and the number of days since the last patient fall. Random checks were performed by the management team to check on the communication method between the staff and to also evaluate the knowledge of the staff on any recent falls.

With the help of the MSN-CNL student, the calculated budget for this project will be no extra cost (Appendix C). The project will utilize the tools and staff currently present in the unit. No additional cost will be required. The Nurse Leader team will take the lead along with the staff that will work on the project as an incentive to move up in the clinical nurse ladder. Not implementing this project can result in an increase in unit falls, which can lead to all financial penalties that hospitals might face. If a project is implemented, it will result in safety for the patients and savings for the unit.

The Institute of Healthcare Improvement (IHI) states that an average day of stay for a patient without a fall is about \$3500 to \$4500, but if the patient falls and has an injury the cost can increase to \$16,500 or more. The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) score will be lowered thus decrease in our market value resulting in fewer members (soft dollars) and lower payment from Centers for Medicare and Medicaid Services (CMS) due to poor patient safety (hard dollars) if we don't take action to prevent further falls from occurring. The Medical-Surgical unit had a total of fourteen falls for 2018. Each fall is multiplied by the total number of falls, and as a result, the estimated cost for an extended day of stay was \$63,000 (Appendix C). With the plan to reinforce the education of safety, we hope to see a 50% decline and save the unit \$31,500 for the year 2019. Each inpatient fall will delay the patient's discharge and add extra costs of \$14,000 or more (France et al., 2018). Falls with no or minor injury will also cost around \$3,500 (Quigley & White, 2013).

The opportunities that were identified were to involve the clinical staff and providing education the commitment from leadership will build the strength and reinforcement of the current fall program. Opportunities for improvement that are identified include effective staff communication, team building, authentic rounding, and patient/family fall prevention education

### **Intervention**

With the use of the IHI model as the quality improvement model, this allowed us to demonstrate a clear explanation of what we are going to try to accomplish and define how we will be able to know if the change was an improvement or not. The MSN-CNL student's role was as a facilitator guiding the workgroup which consisted of the unit administration leaders.

The workgroup using the IHI model for improvement came up with a list of the universal fall prevention practices that are done by the nurses and patient care technicians. From analyzing fourteen falls from the previous year, it was decided that two data on two practices would need a change in order to prevent falls. The first practice would be authentic hourly rounding that would have an emphasis on safety checks and toileting needs. The second practice change would be properly assessing the bed and chair alarms to see if they were appropriately placed based on the Schmidt score.

The workgroup upon assessment identified that appropriate hourly rounding was not really taking place, and bed exit alarms were not properly placed based on the Schmidt score. Based on the Schmidt score, a patient can have a green fall banner, or a yellow fall banner viewed in the patient's chart in EPIC. Appropriate wall cards, green or yellow would be placed and based on the color-coding staff would be able to place patients in the proper zone for the bed alarms.

Green fall risk patients would be placed in zone one, and yellow fall risk patients would be placed on zone two, which is more sensitive. Challenges met were nurse leaders partnering with relief to do a random check on proper zone placement and real-time coaching with the staff.

Two AHRQ tools were utilized on the unit that needed refreshing, the first was the need to address patient's toileting needs with authentic hourly rounding and the second one was making sure that the Schmidt score was assessed correctly. The Schmidt fall risk tool assesses

the patient's mobility, mentation, elimination, current medication, and prior history of falls. To help in improving this assessment, several PDSA cycles have been done (see Appendix D). The workgroup decided to refresh the unit staff during huddles and staff meeting the Schmidt fall risk assessment. The gap found was that certain medication affected patients gait and balance, and the need to reassess within twenty-four hours from admission was likely to be different. The assistant nurse manager does random checks and gives real-time feedback to the nurse to reevaluate the score appropriately.

The second AHRQ tool utilized was a refresher on authentic hourly rounding. The workgroup and team leader observed all nursing staff and checked them off on hourly rounding. Each staff then had a real-time coaching on the right way to round. The gaps found was that only nurses were taking the responsibility of rounding and pct.'s really did not take it seriously. The MSS-CNL came up with the idea to have nurses round all odd hours and pct.'s round even hours. With much challenges and resistance to change the unit has progressed, and it has become a routine.

### **Measures**

The MSN-CNL student and the workgroup chose two outcomes to monitor monthly. One of the outcome measures was to evaluate if falls have been reduced. The numerator is the number of falls that have occurred, and the denominator is the number of patient days. A monthly rate will be calculated per 1,000 patients' days, and a run chart would be formed to display it (see Appendix E). The second measure would be capturing the HCAPHS scores on the question about if the needs were met on patient care. If the rate increases, it would be a good indication that staff is effectively rounding hourly and that the project can move towards the sustainability phase.

The process measures the improvement of proper assessment of the Schmidt fall risk scale. Schmidt scores if done correctly, can identify if the patient is at high risk for falls and place proper fall risk tools to prevent them from falling upon the first eight hours of being admitted. Such data of completion can be collected through a Crystal report that is generated through EPIC that would show the number of completed assessments within eight hours of being admitted.

A one on one blind observation audit was performed with the assistance of the management team during this improvement project to determine how many staff members were doing authentic hourly rounding, making sure that all 5 p's (pain, potty, positioning, pump and placement of item within reach). The numerator is the number of staffs observed performing hourly rounding effectively, and the denominator is the number of staffs observed. The rate is the percentage. The MSN-CNL student shares the finding with the management team of the unit.

### **Ethical Considerations**

The project was reviewed by the hospital leadership faculty and is determined to qualify as an Evidence-based change in Practice Project, and not a Research Project, so institutional review board (IRB) review is not required. (see Appendix F, Statement of Non-Research Determination Form.) The goal of the project was to reduce the rate of falls in a Medical-Surgical unit.

Ethical considerations that need to be addressed for all healthcare workers is to prevent patients harm from falling. Patients place trust in staff to keep them safe. The elderly has a higher risk of falling due to underlying medical issues, such as osteoporosis, dementia, medications that alter the strength and not adequately assessed for mobility upon admission. The

need to keep the patients is great. The evidence-based practice is shared to staff on patient safety. Preventing falls is a nurse code of conduct, and they need to be reminded of that.

### Results

The Medical-Surgical unit has decreased by 20% as of June 30, 2019 (Appendix G) compared to the previous performance period (January 2019 – February 2020). This improvement project will continue until February 20, 2020. A bar graph on the number of falls for two years is displayed on the unit, as it was requested by the workgroup. It serves as a reminder on the progress the staff has made in order to keep the patients safe from falling. The hospital leadership is reviewing the unit practices and implement the “Call Don’t Fall” poster in all the patient rooms (see appendix F). The project has begun to demonstrate a reduction of falls and has reduced healthcare costs. With only five patient falls in the past six months compared to 7 patient falls in the same 2018 timeframe.

### Discussion

#### Key Findings

Several months of collaborative work have gone into this project. The key findings from collected fall data from the fall dashboard, the audits by the nurse leaders, analysis of the HCAHPS scores, and comparing fall pre-post results to assess the effectiveness of the project, has resulted in a successful outcome and met the objectives. The unit will have 50% of fall reductions by May 11, 2020. 100% of nurses will comply with the fall prevention protocols and use 5 Ps to address patient’s needs during the hourly rounding. More than 90% of the nurses will achieve improvements in their skills of the fall risk factors. The scores of staff responsiveness and medication communication in the HCAHPS report will increase up to 15% below the 2019 target goal. 90% of nurses should rate higher on staff communication about the



patient's mobility status and be satisfied with the care they provide Overall, achieving and sustaining the optimal result of fall reductions is what will be work in progress.

### **Lessons Learned**

One lesson learned is that nurses have essential roles in protecting patients from falling. When nurses are equipped with advanced knowledge in fall prevention strategies such as utilizing evidence-based fall prevention tools to assess risks, Authentic hourly rounding, coordinating services across disciplines to improve patient outcomes and to instill preventative measures, the results will be the proof of the work done. Before this project implementation, the staff really didn't take ownership of the consequences of a patient injury, and of course, teamwork was just not there. With the implementation of this project the unit staff have learned to work smart not hard and now work together to acknowledge unit safety issues and help in the prevention of patients falls.

This project will continue to be a work in progress in order to sustain it. The weaknesses of the unit were reviewed and improved, and lessons were learned regarding better communication among the unit team leaders and staff. Huddle messages have improved, and safety is the first item discussed. Staff are now more aware of their patients' surroundings and make sure to plan early in their shift patient safety issues.

### **Summary**

The interventions have shown significant results in achieving the stated goals to improve patients falls by 50%. The outcome measures have improved; the unit manager set the standard for communication for patient safety on a daily, shift to shift basis. The assistant managers have made it a priority to focus on the high fall risk patients and make it a point to discuss any

improvements on hourly rounding that is needed. The unit staff are now speaking up for safety and have improved their skills of working smart, not hard.

## References

- Agency for Healthcare Research and Quality (2013). Preventing Falls in Hospitals: A *toolkit for improving quality of care*. [www.ahrq.gov](http://www.ahrq.gov)
- Titler, M. C. (2016). The effect of translating research into practice intervention to promote the use in evidence-based fall prevention interventions in hospitalized adults: A Prospective pre-post implementation study in the U.S. *Applied Nursing Research*, 31, 52-59.
- Barrett, M. B., Vizgirada, V. M., & Zhou, Y. (2017). Registered nurse and patient care technician perceptions of toileting patients at high fall risk. *MEDSURG Nursing*, 26(5), 317-323.
- Weaver, S. J., Lubomksi, L. H., Wilson, R. F., Pfoh, E. R., Martinez, K. A., & Dy, S. M. (2013). Promoting a culture of safety as a patient safety strategy: a systematic review. *Annals of internal medicine*, 158(5 Pt 2), 369–374. DOI:10.7326/0003-4819-158-5-201303051-00002
- Simpson, J. R., Rosenthal, L. D., Cumbler, E. U., & Likosky, D. J. (2013). Inpatient Falls: defining the problem and identifying possible solutions (Part I). *Improving Health Care Quality: Review*. 3(3) 135-143. DOI: 10.1177/1941874412470665 The National Academies Press, (1999). *To Err Is Human: Building a safer health system*.
- Quigley, P., Neily, J., Watson, M., Wright, M., Strobel, K., (February 28, 2007). "Measuring Fall Program Outcomes." *Online Journal of Issues in Nursing*. Vol 12, No. 2.
- Leone, R. M., & Adams, R. J. (2015). Safety Standards: Implementing Fall Prevention Interventions and Sustaining Lower Fall Rates by Promoting the Culture of Safety on an Inpatient Rehabilitation Unit. *Rehabilitation Nursing*, 41(1), 26-32. DOI:10.1002/rnj.250

AACN Scope and Standards for Acute and Critical Care Nursing Practice (2008) Aliso Viejo,

CA: *American Association of Critical-Care Nurse*

France, D., Slayton, J., Moore, S., Domenico, H., Matthews, J., Steaban, R. L., & Choma, N.

(2017). A Multicomponent fall prevention strategy reduces falls at an academic medical center. *Joint Commission Journal on Quality & Patient Safety*, 43(9), 460-470. DOI: 10.1016/j.jcjq.2017.04.006

Centers for Disease Control and Prevention. (2016). Costs of falls among older adults. Retrieved from <https://www.cdc.gov/homeandrecreationalsafety/falls/fallcost.html>

Centers for Disease Control and Prevention. (2017). Important facts about falls. Retrieved from <https://www.cdc.gov/homeandrecreationalsafety/falls/adultfalls.html>

**CNL Project: Statement of Non-Research Determination Form**

Student Name: Shalini Singh

Title of Project: To reduce falls in a Medical-Surgical Unit

Brief Description:

- A) **Aim Statement:** The aim of this project will be to review the inpatient fall protocol prevention and re-educate staff on the appropriate usage of the tools to prevent patient falls
- B) **Description of Intervention:** To have the nursing staff learn, review, and apply fall prevention interventions for fall risk patients in order to help reduce fall rate by 50 percent May 2020.
- C) **How will this intervention change practice:** The fall reduction intervention will hope to have an improvement in staff engagement with improved hourly rounding to promote patient safety and ultimately reduce injuries from falls.
- D) **Outcome measurements:** The total number of falls on the medical-surgical unit is 6 or less by December 30, 2019.

To qualify as an Evidence-based Change in Practice Project, rather than a Research Project, the criteria outlined in federal guidelines will be used: (<http://answers.hhs.gov/ohrp/categories/1569>)

☐ This project meets the guidelines for an Evidence-based Change in Practice Project, as outlined in the Project Checklist (attached). Student may proceed with implementation.

☐ This project involves research with human subjects and must be submitted for IRB approval before project activity can commence. Comments:

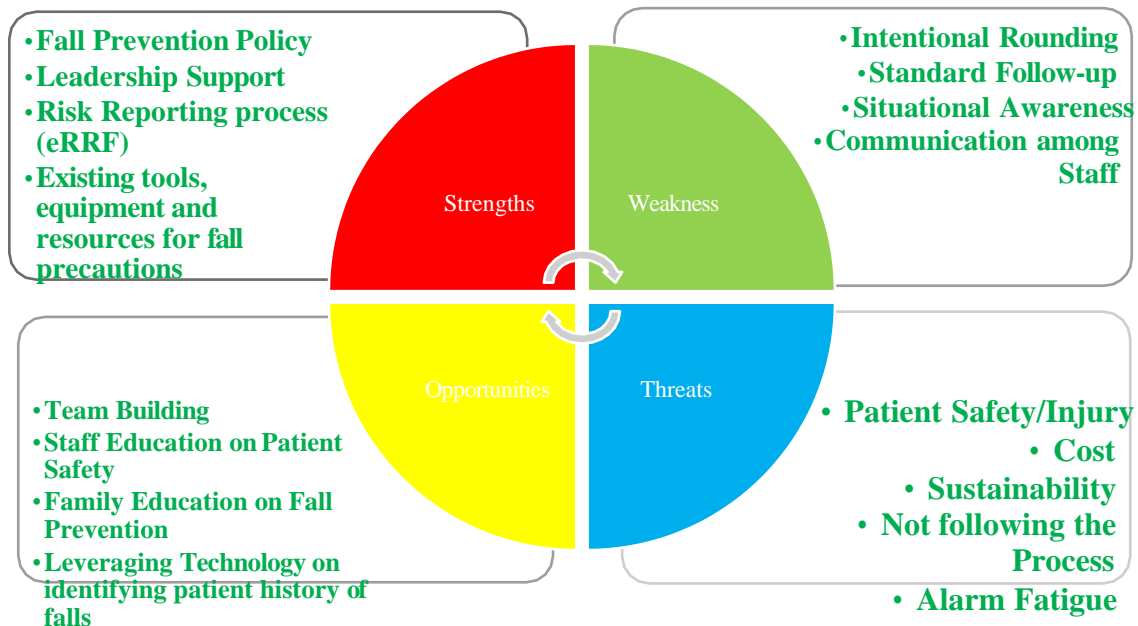
## Appendix A

## Kotter 8 Steps for Managing Change

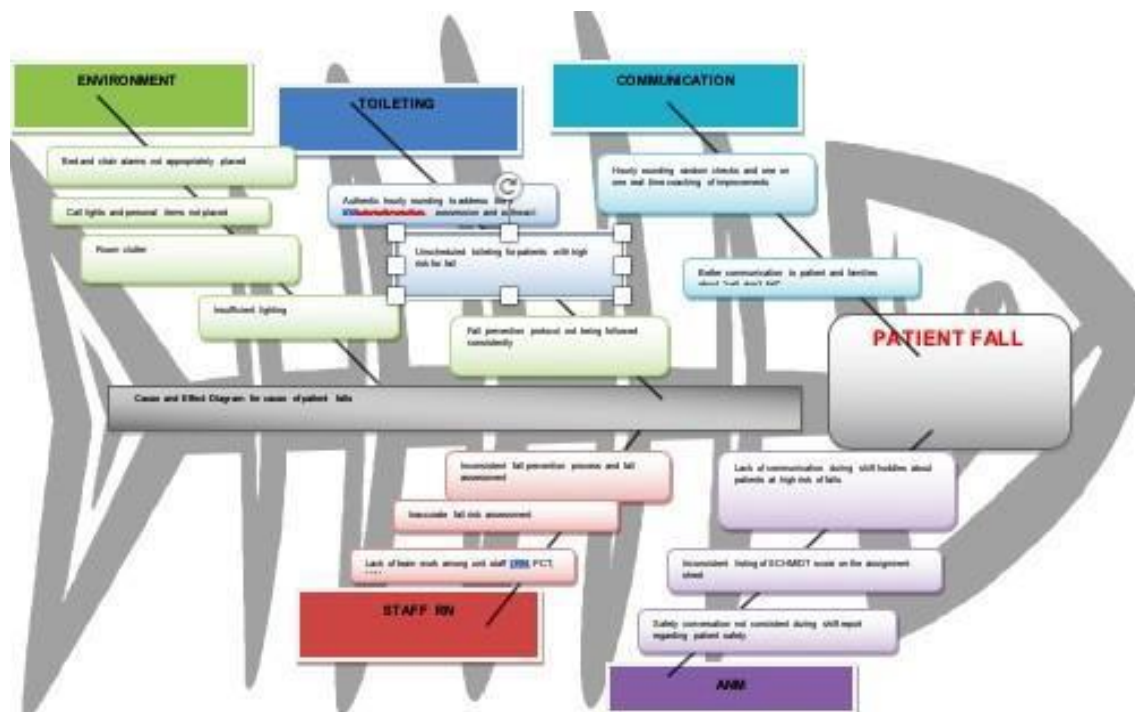


## APPENDIX B

## SWOT Analysis



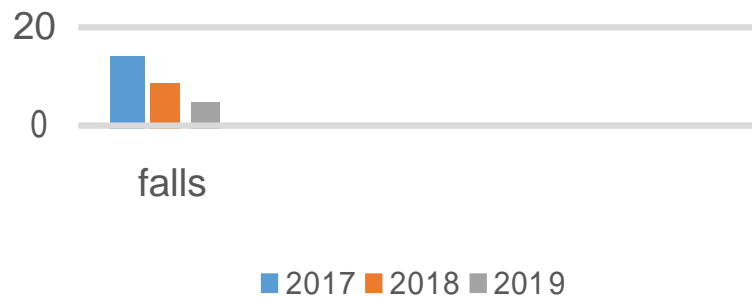
## Fishbone



## Appendix C

	YEAR	Cost-Benefit Analysis	
Cost Description	2018	2019(estimate)	2020(estimate)
# Of falls	14	7	4
Cost to unit for total of falls	14x\$4500 (\$63,000)	7x\$4500 (\$31,500)	4x\$4500 (\$18,000)
Cost savings (Benefit)	-\$63,000 (loss)	\$63,000 - \$31,500= \$31,500 (Benefit)	\$63,000 - \$18,000 = \$45,000 (Benefit)
Cost for training program	0	0	0
Cost of Education re-enforcement	0	0	0
Net Benefit		\$31,500	\$45,000

Medical Surgical Number of Falls





	<b>Behavior Ratings:</b> 1= skills not demonstrated 2= skills partially demonstrated 3=skills proficiently demonstrated 4= excellent demonstration of skills 5= exceptional <u>demonstration</u> <u>and</u> can mentor others N/A= Not applicable	<b>Observation 1</b> <b>Date:</b>  <b>All ratings 3+:</b> <input type="checkbox"/> Yes =competent <input type="checkbox"/> No= repeat	<b>Observation 2</b> <b>Date:</b>  <b>All ratings 3+:</b> <input type="checkbox"/> Yes =competent <input type="checkbox"/> No= repeat	<b>Observation 3</b> <b>Date:</b>  <b>All ratings 3+:</b> <input type="checkbox"/> Yes =competent <input type="checkbox"/> No= create plan
<b>Prior to Rounding</b>	Knows key priorities of the unit, and has appropriate questions ready			
	Has census sheet (which includes language preference field if available). If language preference is not English, engages appropriate qualified interpreting service resource			
	Has business cards ready			
<b>Opening</b>	Knocks on door, asks permission to enter, acknowledges patient/family			
	Performs hand hygiene, in front of patient if possible (key words, <i>for your safety</i> )			
	Introduces name and role (key words, <i>nurse leader</i> ) and gives business card			
	Explains purpose of rounding ( <i>Our goal is to provide you with exceptional care</i> )			
	Builds trust & confidence in (i.e. manages up) patient's primary nurse as appropriate			
<b>Key Questions</b>	Asks key rounding questions in a conversational manner			
	Builds trust & confidence as appropriate			
	Validates with patient how well staff are doing with priority areas and behaviors – harvests recognition as appropriate			
	<b>New admits/transfers:</b> assesses for understanding of plan and if there are concerns (i.e. ED, ICU)			
	<b>Discharges:</b> Builds trust and confidence in the discharge process, instructions, and survey if appropriate			
<b>Close</b>	Demonstrates use of service recovery model if appropriate			
	Asks if there is something <u>else</u> they can do & explains when a nurse leader will return			
	Performs hand hygiene			
<b>Engagement</b>	Draws out patient's perspective, demonstrates compassion and appropriate body language/voice, makes appropriate use of interpreting service resource, and completes encounter before disengaging interpreter			
<b>Follow Up</b>	Immediately takes action on service recovery issues & closes loop with patient when appropriate			
	Can list what was learned about the quality of care given			
	Provides <u>investment coaching</u> to individuals to align behavior with expectations or provides recognition			
<b>Comments</b>	(Note suggestions for 1-2s, or things done well for 4-5s)			
<b>When Validated:</b>	<b>Supervisor /Coach Signature:</b>		<b>Employee Signature:</b>	<b>Date:</b>
<b>NURSE LEADER (Observed):</b>	<b>UNIT:</b>	<b>SHIFT:</b>	<b>OBSERVER:</b>	

**Instructions:** Step 1) Your supervisor/coach will observe you either role playing or actually rounding with your patients and give you feedback. They will complete and give you a copy of this form after each observation. Step 2) Practice rounding for patients, integrating the suggestions from your supervisor/coach. Step 3) Your supervisor/coach will observe you up to a total of 3 observations to validate you as competent in Rounding for Patients.



## APPENDIX E

Literature Evaluation Table

Study	Design	Sample	Outcome/Feasibility	Evidence rating
Quigley, P., Neily, J., Watson, M., Wright, M., Strobel, K., (February 28, 2007). "Measuring Fall Program Outcomes." <i>Online Journal of Issues in Nursing</i>	Quality Improvement using evidence from a systematic review	The program was developed for three long term care units representing 160 beds in a rural 400-bed Veterans Administration Medical Center to evaluate and measure fall outcomes	analyzed effectiveness of fall prevention programs, rates of both fall incidence and severity of injury should be included. Each rate is needed to monitor the effectiveness of fall prevention interventions for a specific population in a specific clinical setting	L IIIA
Titler, M. C. (2016). The effect of translating research into practice intervention to promote the use in evidence-based fall prevention interventions in hospitalized adults: A Prospective pre-post implementation study in the U.S. <i>Applied Nursing Research</i> , 31, 52-59.	A multi-faceted Translating Research prospective pre-post implementation cohort design.	The intervention was used to implement the Targeted Risk Factor Fall Prevention Bundle composed of evidence-based fall prevention interventions designed to mitigate patient-specific fall risks. Dependent variables (fall rates, fall injury rates, fall injury type, use of Targeted Risk Factor Fall Prevention Bundle) were collected at baseline, and following completion of the 15month implementation phase.	Use of fall prevention interventions improved significantly ( $p<0.001$ ) for mobility, toileting, cognition, and risk reduction for injury, but did not change for those targeting medications.	LEVEL II
Simpson, J. R., Rosenthal, L. D., Cumbler, E. U., & Likosky, D. J. (2013). Inpatient Falls: defining the problem and identifying possible solutions (Part I). <i>Improving Health Care Quality: Review</i> .	Quality Improvement using evidence from a systematic review	Three different Fall Risk stratification: STRATIFY (n=548) MFS (n=2689) HFRM (n=338)	The evidence-based studies using the Morse Falls Scale a more sensitive assessment of the patients' potential for falling, and this will lead to a more suitable intervention to reduce potential patient fall.	LEVEL V
France, D., Slayton, J., Moore, S., Domenico, H., Matthews, J., Steaban, R. L., & Choma, N. (2017). A Multicomponent fall prevention strategy reduces falls at an academic medical center. <i>Joint Commission Journal on Quality &amp; Patient Safety</i> ,	Pilot study	A design of the pre-post study was used to test whether the multifaceted fall prevention strategy could target various types of fall risk factors and reduce falls on three acute patient care units with a total of 86 beds.	This research indicated the importance of developing fall prevention strategies that will involve multicomponent interventions to tackle various risk factors among assessed populations and environment	LEVEL IIIA
Weaver, S. J., Lubomski, L. H., Wilson, R. F., Pfoh, E. R., Martinez, K. A., & Dy, S. M. (2013). Promoting a culture of safety as a patient safety strategy:	Systemic review	Identifies and assesses interventions used to promote safety	evidence suggests that interventions can improve perceptions of safety culture and potentially reduce patient harm.	LEVEL V

a systematic review. <i>Annals of internal medicine</i>		culture or climate in acute care settings		
---	--	---	--	--

## APPENDIX F

## EVIDENCE-BASED CHANGE OF PRACTICE PROJECT

## CHECKLIST

STUDENT NAME: Shalini SinghDATE: 6/11/2019.SUPERVISING FACULTY: Kaiser Redwood City.

Instructions: Answer YES or NO to each of the following statements:

Project Title:	YES
The aim of the project is to improve the process or delivery of care with established/ accepted standards, or to implement evidence-based change. There is no intention of using the data for research purposes.	X
The specific aim is to improve performance on a specific service or program and <b>is a part of usual care</b> . ALL participants will receive standard of care.	X
The project is <b>NOT</b> designed to follow a research design, e.g., hypothesis testing or group comparison, randomization, control groups, prospective comparison groups, cross-sectional, case control). The project does <b>NOT</b> follow a protocol that overrides clinical decision-making.	X
The project involves implementation of established and tested quality standards and/or systematic monitoring, assessment or evaluation of the organization to ensure that existing quality standards are being met. The project does <b>NOT</b> develop paradigms or untested methods or new untested standards.	X
The project involves implementation of care practices and interventions that are consensus-based or evidence-based. The project does <b>NOT</b> seek to test an intervention that is beyond current science and experience.	X
The project is conducted by staff where the project will take place and involves staff who are working at an agency that has an agreement with USF SONHP.	X
The project has <b>NO</b> funding from federal agencies or research-focused organizations and is not receiving funding for implementation research.	X
The agency or clinical practice unit agrees that this is a project that will be implemented to improve the process or delivery of care, i.e., <b>not</b> a personal research project that is dependent upon the voluntary participation of colleagues, students and/ or patients.	X
If there is an intent to, or possibility of publishing your work, you and supervising faculty and the agency oversight committee are comfortable with the following statement in your methods section: <i>"This project was undertaken as an Evidence-based change of practice project at X hospital or agency and as such was not formally supervised by the Institutional Review Board."</i>	X

**ANSWER KEY:** If the answer to **ALL** of these items is yes, the project can be considered an Evidence-based activity that does NOT meet the definition of research. IRB review is not required. Keep a copy of this checklist in your files. If the answer to **ANY** of these questions is **NO**, you must submit for IRB approval.

\*Adapted with permission of Elizabeth L. Hohmann, MD, Director and Chair, Partners Human Research Committee, Partners Health System, Boston, MA.

## APPENDIX G



## Project Charter

### Project Charter: Reducing Falls in a Medical-Surgical Unit

**Global Aim** To prevent patient harm and injury from fall events in the Medical-Surgical by developing a sustainable falls prevention program.

**Specific Aim:** To reduce 25 % of the overall fall events per 1000 patient days in MS from a baseline rate of 3.1% to 2.3% and to lengthen days between falls from an average of 12 days to 30 days by February 2020.

### Background:

In the United States, falls affect around 700,000 to 1,000,000 people resulting in a serious injury that leads to increased health care utilization (Ganz, Huang, & Saliba, 2013). Falls affect not only the elderly population but anyone who are at risk due to various factors including changes in their physical and medical conditions that can leave them weakened and confused (The Joint Commission, 2013). Falls with severe injuries resulting in death are among the top 10 reportable sentinel events in hospitals (The Joint Commission, 2013). US hospitals' falls rate per 1000 patient days is at 3.53% (Bouldin et al., 2013). The average hospital cost for a fall injury is over \$30,000 (CDC, 2016). Research has shown that one-third of fall events are preventable. Hospitals must evaluate the effectiveness of all fall reduction activities including assessment, interventions, and education as well as management of patient risk for falls (The Joint Commission, 2013). The facility has experienced increased falls from last year and has not proved a sustainable falls prevention program.

### Sponsors

Chief Nursing Executive	Amy Young
DCEPI	Josephine Reyes
Medical-Surgical Unit Department Manager	Sung Murata

### Goals

- To prevent patient harm and injury from falls events by developing a sustainable hospital falls prevention program.
- Engage staff to drive a culture of safety by improving communication with authentic hourly rounding
- To reduce the cost for fall with injury and extended hospital stay